SPECIALIZATION OR DIVERSIFICATION? A BASIC POLICY DECISION CONFRONTING ECONOMICALLY UNDERDEVELOPED COUNTRIES*

I

Introduction

ECONOMISTS have become increasingly concerned during the past ten or fifteen years with the matter of economic growth. Currently an unprecedented effort is being made by theorists and empirical researchers to discover what is required to initiate and sustain growth of national per capita outputs. In part this is the result of anxiety over the future prospects of the relatively wealthy national economies which has been aroused by the demonstrated cyclical instability of these economies; but the more novel and important factor responsible for the recent emphasis upon growth economics is interest in the plight of the poorer, economically underdeveloped two-thirds of the world and the problem of breaking the grip of the crushing poverty that prevails.

As a consequence of the realignment of the world power system following World War II, the economically underdeveloped countries have taken on an entirely new significance. A new nationalism has sprung up in these countries which has manifested itself in demands for political independence and an end to increasing economic inequality. This, coupled with the schism between East and West, has resulted in a fundamental change in the international political situation. The underdeveloped countries, with their newly-awakened national pride and their newly-acquired

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economic aspirations, find themselves in the pivotal position in the world struggle; and their intention to capitalize on this situation is abundantly clear.

While it is generally agreed on all sides that the aim of policy in these countries must be the alleviation of the prevailing poverty by increasing the per capita level of income, the means best employed in attempting to accomplish this are in dispute. One group of economists advises policies consistent with the dictates of classical or orthodox economic theory as it was developed by Adam Smith and his followers in the classical school. Another group of economists takes the position that this body of theory is not relevant to the problems of the underdeveloped countries. The latter group naturally advises quite different policies than the former.

The split within the ranks of economists is perhaps most clearly apparent from the differences in policies advised in connection with one of the most fundamental decisions with which the leaders in the underdeveloped countries are confronted; namely, whether in their respective national economies growth will be best promoted by unplanned, market-directed specialization of production, or by planned, government-sponsored diversification of production. The choice which is made in this matter not only is likely to influence the chances of attaining rapid and sustained improvement in material standards of living in these countries but also is likely to affect the character of economic and political institutions which will evolve as economic development takes place.

II

The Classical Theory and Its Criticism

One of the cornerstones of classical economic theory is the proposition that market-determined specialization in production (Adam Smith used the term "division of labor") promotes economic well-being by making possible a greater volume of output, and hence a higher-level per capita income, from a given application of resources. Accordingly, rational pursuit of economic self-interest, whether on the part of individuals or national economies, requires the application of available resources to the production of those goods and services which can be produced with greatest relative efficiency, and the exchange of some part of the resulting output for that of others concentrating their productive efforts along lines consistent with their own resource endowments.

This proposition is known as the "doctrine of comparative advantage." As applied to national economies the argument for specializing in accordance with the dictates of comparative advantage is the following: One country can benefit itself economically by specializing in the production of those things in which it has a comparative advantage because, by exchanging some part of its output for that produced by other countries, it will be enabled to obtain a larger aggregate volume of goods and services (and perhaps a greater variety and better quality as well) from a given expenditure of resources. Thus, given well-functioning domestic markets for factors of production and international markets for goods and services, national specialization coupled with free international trade is supposed to afford a means of promoting a country's productivity and economic growth; and this in harmony with, rather than at the expense of, other countries.[1]

The logic of the comparative advantage doctrine has always impressed economists and statesmen imbued with the viewpoint of the advanced, industrial countries much more than it has those intent upon fostering the economic growth of relatively backward countries engaged principally in the production of foodstuffs and raw materials. Spokesmen for these latter countries argue that the classical doctrine is inappropriate as a guide to policy formulation where the promotion of economic growth is the object; that adherence to the dictates of the doctrine would jeopardize the long-run growth potentials of their countries. In their view, the growth of economies which are initially predominantly agricultural requires the planned establishment of diversification as between primary and industrial production; i.e., requires government-sponsored industrialization beyond what would be forthcoming from the operation of free market forces. Thus, they advocate policies calling for governmental interference with domestic and international market price relationships as the means of achieving the desired goal.

III

The Issue Viewed Historically

Historically, the proposition that international division of labor coupled with free trade promotes the "wealth of nations" was first employed to attack mercantilist dogma. It was the mercantilist view that national wealth and power were best fostered by government controls, especially those exercised over international trading relationships. It was also a tenet of mercantilism that industry and commerce were preferable to agriculture as branches of the national economy. The English classical economists (the most notable among whom, in addition to Adam Smith, were David Hume, David Ricardo, and John Stuart Mill) denied the inherent superiority of one line of economic activity over another. Furthermore, they argued that mercantilist interference with specialization and trade caused resources to be diverted from more to less productive employments or, in other words, that assistance could be given to one sector of the economy only at a more than offsetting expense to the other sectors.

The argument of the English classical economists based on the doctrine of comparative advantage (the doctrine itself being rigorously formulated for the first time during the course of the debate) won widespread popular acceptance in Britain, and the development of the British economy during the nineteenth century was largely in accordance with the classical model. However, in countries where industrialization lagged behind that in Britain, the policy implications of the classical theory failed to command the same support.

The course of United States economic development during the nineteenth century was substantially influenced by the protectionism and economic nationalism of Alexander Hamilton and others following his lead. It was Hamilton's position that the government should actively promote the balanced growth of the economy rather than passively permit specialization in agricultural production for the international market. He advocated that tariffs and "pecuniary bounties" (i.e., direct subsidies) be employed to protect domestic manufacturing industry from foreign competition during an initial period of growth and consolidation in order to achieve the substantial degree of diversification in production and independence from foreign supplies which he believed to be necessary for the rapid economic growth of the country and the maintenance of political independence. A long history of protectionist tariff legislation aimed at promoting industrialization and broadening the domestic market testifies to the persuasiveness of this line of reasoning in this country.

In Germany the classical doctrine was subjected to a rigorous theoretical challenge by the economist Friedrich

List. According to List, the English economists (and Adam Smith in particular) had overlooked the significance of differences in stages of economic development between countries. A nation desirous of increased productive and political power but whose "manfacturing power" was relatively underdeveloped should pursue policies which would promote a balance between agriculture and manufacturing industry. Only after a stage of development comparable to that of the most advanced industrial countries was achieved did the classical "cosmopolitical" argument for international *laissez faire* become valid. In List's view, therefore, what constituted appropriate policy for industrially-supreme Britain was not appropriate policy for Germany and the United States, whose manufacturing industries were in their infancy. He advocated that the governments in Germany and the United States should follow policies which would promote increased internal trade while temporarily protecting domestic industry with a so-called "educational tariff." List's infant industry argument for protection inspired commercial policy in both countries.

The forced industrialization of Japan during the latter half of the nineteenth century and the first part of this century was even further at odds with the liberal classical model. The state, motivated by a desire for increased economic strength which could serve as a base for political power and imperialist expansion, actively promoted rapid industrialization by means of tariffs and subsidies as well as by direct participation in the ownership and management of numerous industries. Soviet Russia's economic development, as is well known, has also been characterized by a ruthless policy of forced industrialization. The Russian example of planned, forced industrialization carried out in an economy which was initially predominantly agricultural and carried out in virtual isolation from the rest of the world represents the extreme of government intervention in economic activity and is, therefore, the antithesis of the classical model.

IV

Contemporary Debate Concerning the Relevance of Classical Model

The question of the present-day relevance of the classical development model for the relatively poor, economically backward and predominantly agricultural countries is being vigorously debated in the literature on economic growth. The case for the position that the classical, comparative advantage doctrine is not relevant to the problems of these countries seems to be based principally on a modern version of the infant industry argument, supported by certain statistical evidence which purports to show that specialization in primary production and rapid, sustained economic growth are incompatible. Defenders of the relevance of the classical model to the problems of the underdeveloped countries, on the other hand, are arguing that on logical, practical, and factual grounds the critics' case is unconvincing and that these countries can ill afford to sacrifice the benefits which would flow from a division of labor in accordance with their respective comparative advantages.

The modern version of the infant industry argument for government intervention has been expanded beyond the nineteenth century proposition that it is sometimes possible by means of temporary assistance to enable domestic industry to realize potential operating economies and competitive strength and, thereby, to bring about a better allocation of resources over the long run. A second point that is often made nowadays in favor of subsidizing the growth of industry is that certain "external economies" accompany industrialization, so that the social cost is below the private cost. Examples of such economies would be lower cost power, transportation, or communications as a result of increased scales of operations made possible by enlarged industrial demand for such services. A third argument for government encouragement of industrial expansion which is along much the same lines is that action is often necessary in the backward, agricultural countries to offset imperfections in the labor markets which prevent the movement of labor unproductively employed in agriculture into more productive employment in industry.[2]

Each of these arguments for subsidizing industrialization at the expense of agriculture is unassailable where conditions are such that the postulated economies can be made to exceed the cost in terms of foregone production which the subsidization of industry entails. Opponents of government-directed resource diversion, when confronted by this expanded version of the old infant industry argument, are consequently forced to fall back on the purely practical objection that governments are not likely to be able either to discern accurately those cases in which the economies are realizable or to devise measures appropriate to their realization.

There are, in addition, three major statistically-based arguments commonly employed to support the contention that primary production is neither an adequate nor a reliable base for rapid and sustained economic growth. First, there is the argument that because the prices of foodstuffs and raw materials in the world market are subject to wide fluctuations in response to changes in business conditions in industrialized countries and to changes in supply, it is unwise to depend upon the exchange of these commodities for other goods and services necessary to the development of a nation's economy. The related point is also often made that a high degree of specialization in the production of one or a few primary products makes the economy of the specializing country vulnerable to obsolescence as a consequence of technological changes (e.g., the development of synthetic substitutes) or change in consumer taste. A second major argument against specialization in the production of foodstuffs and raw materials is based on the claim that primary-producing countries tend to experience secular deterioration in the terms upon which they are able to trade their commodities for manufactures, with the result that the gains from trade accrue in large measure to the industrialized countries. The third argument in this group is based on findings that countries with high per capita incomes generally have a high proportion of their populations engaged in manufacturing industry, and that in high- and low-income countries alike, per worker productivity is generally greater in manufacturing than in agricultural employments.

How do the defenders of the present-day relevance of the classical doctrine meet these last three arguments? Taking up the arguments in reverse order, the principal points in the rebuttal to each appear to be the following:

There is little quarrel with the statistical data which show that high-income countries generally have a high proportion of their populations engaged in manufacturing and that in most countries labor productivity in manufacturing is above that in agriculture, although some defenders delight in citing exceptions to the general pattern and others indicate skepticism as to the feasibility of any meaningful comparison of per capita incomes in advanced and underdeveloped countries and of any reliable measurement of differences in the productivity of industrial and agricultural workers within the same country. It is not the statistics, however, but rather the conclusions based on the statistics which have come in for the most telling criticism. It has been pointed out that it does not follow from these statistical correlations that higher per capita incomes and increased worker productivity can be achieved in predominantly agricultural countries merely by subsidizing the growth of manufacturing industry. Such reasoning is based upon the unwarranted assumptions that the correlations establish functional or causal relationships and, further, that they indicate in each case which are causes and which are effects. Actually, as the critics of this line of reasoning point out, these statistical data indicate nothing about whether policies directed toward overcoming backwardness and inefficiency in agriculture or policies directed toward the promotion of industrialization at the expense of agriculture are the most likely to bring about higher per capita incomes and increased labor productivity in countries initially specializing in primary production.

The rebuttal to the terms of trade argument against specialization in the production of primary products is somewhat more involved. In the first place, the statistical data which purport to show that foodstuffs and raw materials exchange for manufactures in the world market on ever-worsening terms are challenged on numerous grounds, principal among which are the following: that the base year is arbitrarily selected; that inadequate allowances are made for changes in volume and composition of world trade, as well as for the quality of goods traded; that adjustments for transportation costs and changes in such costs are omitted or improperly made; and that the long-run movements in the terms upon which particular commodities have traded for manufactures have differed so widely that the experience of each individual country must be considered as a separate case. In short, it has not been established statistically to everyone's satisfaction that in the past, primary-producing countries generally have experienced a secular deterioration in terms upon which they have been able to trade their commodities for manufactures.

Some defenders of the classical doctrine pursue the point further, however. They argue that even if it is granted that in the past the terms of trade have moved against primary producers, it does not follow that the trend will continue in the future. There are some reasons for believing that it might—e.g., Engel's law, the proposition that the income elasticity of demand for agricultural products is lower than that for industrial products—and some reasons for believing that it might not—e.g., the fact (if it is a fact) that the law of diminishing returns is particularly operative in the production of foodstuffs and raw materials. Furthermore, they argue, even if it were reasonable for primary producers to expect future deterioration in their commodity terms of trade, it would not necessarily follow that they should expect the advantage from trading with the industrialized countries to be continuously diminished, since at the same time that commodity terms of trade worsen, the terms upon which domestic resources devoted to primary production are able to command foreign manufactures may improve as a result of production economies (i.e., there may result an improvement in the "factorial terms of trade"). And finally, so the rebuttal goes, even if both the commodity and factorial terms of trade do move against primary-producing countries in the future, there is no assurance that reallocation of resources from agriculture to industry would be advantageous since the cost in foregone production resulting from inefficient utilization of resources might exceed the loss stemming from the unfavorable movement in the terms of trade.

The third statistically-based argument against specialization in the production of foodstuffs and raw materials, it will be recalled, is that the prices of these commodities are subject to wide cyclical fluctuations in response to business conditions in the industrialized countries and to variations in the amount supplied on the world market. The statistical evidence is indisputable in this case, and it cannot be denied that countries exporting primary products often experience severe difficulties during periods of depressed commodity prices. Defenders of the classical development model, however, deny that this situation justifies policies of forced industrialization, claiming instead that it constitutes persuasive evidence of the need for aggressive contracyclical monetary and fiscal measures in the primary-producing countries and for international action designed to reduce the violence of business fluctuations. The argument for subsidized industrialization based on the related point that dependence upon the production and export of one or a few primary commodities makes an economy particularly vulnerable to abrupt cessation of demand in the world market is rebutted differently. Defenders against this argument claim that government assistance to otherwise uneconomic industrial activities would not help overcome the problem since the assisted industries would be largely dependent upon domestic demand, which in turn hinges upon the prosperity of the agricultural sector. Thus, such industries would experience difficulties whenever agricultural incomes declined, and therefore they would afford an ineffective hedge against the risk of economic difficulties resulting from technological change and change in consumer taste.

So much for the major arguments being made in the contemporary literature. Perhaps it should be emphasized that the question being debated is whether unplanned, market-directed specialization of production or planned, government-sponsored diversification of production is the best or most desirable course for leaders in the underdeveloped countries to elect. It is not the position of either side in the debate that one course of action or the other is the only way by which economic growth can be achieved.

V

Resolution of the Issue in the World of Affairs

In the world of affairs, statesmen, not economists, make the decisions between alternative economic policies. In those countries determined to take actions which will improve their positions economically, the choice between policies which will promote specialization and world trade and those which will promote diversification and national self-sufficiency is made by political leaders. The advice of economists may be solicited, but the choice in most instances is likely to be heavily conditioned by non-economic considerations.

The spirit of nationalism which prevails in many of the economically underdeveloped countries causes these countries to be particularly attracted to policies which will promote industrialization. The establishment of domestic manufacturing industry seems to be regarded as demonstration of progressiveness, and it therefore serves as a means of enhancing national prestige. Furthermore, the promotion of industrialization works to increase potential military strength and to reduce the threat of imperialist exploitation by the advanced, industrialized countries. It is not unreasonable to expect, therefore, that many of the underdeveloped countries will elect to promote industrialization even though their comparative advantages clearly lie in primary production.

Unlike the nineteenth century when the growth of domestic industry was fostered principally by means of protective tariffs, today when it is national policy to promote domestic industrialization a large variety of economic controls are likely to be employed to frustrate the operation of market forces. One of the most striking developments of this century has been the increased complexity and comprehensiveness of schemes for controlling economic activity. Thus, not only are many of the underdeveloped countries likely to elect diversification rather than specialization as the means to achieve the economic growth which they desire, but they are likely to employ as the means central planning and control of a comprehensiveness beyond the imagination of nineteenth century proponents of diversification.

To the extent that countries are successful in developing their economies by these means, they are likely to emerge in the future as advanced countries with economies that are largely collectivist and government-directed rather than individualistic and guided by private enterprise. In other words, when they take their place alongside the advanced countries their economies are likely to be more in accord with the Soviet than the American model. What the political significance of this likelihood is, and what it indicates United States policy toward the currently underdeveloped countries should be, I leave for those qualified to judge.

VI

Conclusion

Whatever the long-run political implications of the choice made by leaders in the underdeveloped countries between unplanned, market-directed specialization in production and planned, government-sponsored industrialization, the long-run economic danger is that the policies adopted will not permit the fullest possible increase in productivity and improvement in per capita levels of income. There is the danger that excessive nationalism may result in such severe malallocation of resources that economic growth over the long run will be impossible without an initial and perhaps prolonged period of the severest sort of material sacrifice. On the other hand, there is the danger that excessive reliance upon market forces to determine resource allocation may result in the currently underdeveloped countries being assigned a permanent role in the world productive system which is incompatible with their rapid and sustained economic growth. It will be tragic if, as a result of misguided policy decisions, the aspirations of the masses of the people for improvement in their economic lot are disappointed.

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NOTES

1. Since production ordinarily takes place under conditions of increasing cost and since many goods and services cannot be traded internationally because of prohibitive transportation cost, perishability and so forth, national specialization in accordance with comparative advantage would normally fall far short of complete specialization; i.e., each country would normally produce a wide range of goods and services.
2. There are, in addition to those cited in the text, two other theoretically possible ways in which a country can benefit by means of protective tariffs, subsidies, or direct economic controls that are contrary to the spirit of the comparative advantage doctrine. Up to a point, protection afforded domestic industry will yield gains in the form of improved "terms of trade" (i.e., the ratio at which exports exchange for imports) greater than the losses imposed by the resulting inefficiency in resource allocation. Also, domestic unemployment may be alleviated by policies which result in a favorable balance of trade (i.e., an excess of exports over imports). However, in practice neither of these theoretical possibilities is of much importance because they are based on the unlikely assumption that the countries at whose expense the gains are made would refrain from retaliation.